

## SEQUENCE LISTING

&lt;110&gt; FULLER, JAMES

&lt;120&gt; NUCLEIC ACID CONSTRUCTS

&lt;130&gt; 036481-0177

&lt;140&gt; 10/575,087

&lt;141&gt; 2006-04-10

&lt;150&gt; PCT/GB2004/004279

&lt;151&gt; 2004-10-11

&lt;150&gt; 60/509,936

&lt;151&gt; 2003-10-10

&lt;160&gt; 54

&lt;170&gt; PatentIn version 3.3

&lt;210&gt; 1

&lt;211&gt; 685

&lt;212&gt; DNA

&lt;213&gt; Human cytomegalovirus

&lt;400&gt; 1

aatattggct attggccatt gcatacgttg tatctatatac ataatatgta catttatatt	60
ggctcatgtc caatatgacc gccatgttga cattgattat tgactagtta ttaatatgtaa	120
tcaattacgg ggctcattagt tcatagccca tatatggagt tccgcgttac ataacttacg	180
gtaaatggcc cgcctggctg accgcccac gaccccgcc cattgacgtc aataatgacg	240
tatgttccca tagtaacgcc aatagggact ttccattgac gtcaatgggt ggagtattta	300
cggtaaaactg ccacttggc agtacatcaa gtgtatcata tgccaagtcc gcccctatt	360
gacgtcaatg acggtaaatg gccgcctgg cattatgccc agtacatgac cttacgggac	420
tttcctactt ggcagtacat ctacgtatta gtcacgcta ttaccatggt gatgcgggtt	480
tggcagtaca ccaatgggag tggatagcgg tttgactcac ggggatttcc aagtctccac	540
cccattgacg tcaatgggag tttgttttg caccaaaatc aacgggactt tccaaaatgt	600
cgtaataacc ccgcccgtt gacgcaaatg ggcggtaggc gtgtacgggtg ggaggtctat	660
ataagcagag ctcgtttagt gaacc	685

&lt;210&gt; 2

&lt;211&gt; 131

&lt;212&gt; DNA

&lt;213&gt; Human cytomegalovirus

&lt;400&gt; 2

gtcagatcgc ctggagacgc catccacgct gttttgacct ccatagaaga caccgggacc	60
gatccagcct ccgcggccgg gaacggtgca ttggaacgcg gattccccgt gccaaagagt	120
actcaccgtc c	131

&lt;210&gt; 3

&lt;211&gt; 135

&lt;212&gt; DNA

&lt;213&gt; Rattus rattus

<400> 3  
 atcagcaagc aggtatgtac tctccagggt gggcctggct tccccagtca agactccagg 60  
 gatttgaggg acgctgtggg ctcttctctt acatgtacct ttgctagcc tcaaccctga 120  
 ctatcttcca ggtca 135

<210> 4  
 <211> 955  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 chimeric promoter sequence

<400> 4  
 aatattggct attggccatt gcatacgttg tatctatata ataatatgta catttatatt 60  
 ggctcatgtc caatatgacc gccatgttga cattgattat tgactagtta ttaatatgtaa 120  
 tcaattacgg ggtcattagt tcatagccca tatatggagt tccgcgttac ataacttacg 180  
 gtaaattggcc cgcttggtg accgccaac gaccccgcc cattgacgtc aataatgacg 240  
 tatgttcccc tagtaacgcc aatagggact ttccattgac gtcaatgggt ggagtattta 300  
 cggtaaacgt ccacttggc agtacatcaa gtgtatcata tgccaagtc gccccctatt 360  
 gacgtcaatg acggtaaatg gccgcctgg cattatgccc agtacatgac cttacgggac 420  
 tttcctactt ggcagtacat ctacgtatta gtcacgcta ttaccatggt gatgcggttt 480  
 tggcagtaca ccaatgggcg tggatagcgg ttgactcac ggggatttcc aagtctccac 540  
 cccattgacg tcaatgggag tttgttttgg caccaaaatc aacgggactt tccaaaatgt 600  
 cgtaataacc ccgccccgtt gacgcaaatg ggcggtaggc gtgtacggtg ggaggtctat 660  
 ataagcagag ctcgtttagt gaaccgtcag atcgctgga gacgccatcc acgctgtttt 720  
 gacctccata gaagacaccg ggaccgatcc agcctccgcg gccgggaacg gtgcattgga 780  
 acgcggtatc cccgtgccaa gactgactca ccgtccggat ctacagcaagc aggtatgtac 840  
 tctccagggt gggcctggct tccccagtca agactccagg gatttgaggg acgctgtggg 900  
 ctcttctctt acatgtacct ttgcttgcc tcaaccctga ctatcttcca ggtca 955

<210> 5  
 <211> 121  
 <212> DNA  
 <213> Hepatitis B virus

<400> 5  
 cagagtcagg ggtctgtatt ttcctgctgg tggctccagt tcaggaacag taaaccctgc 60  
 tccgaatatt gcctctcaca tctcgtcaat ctccgcgagg actggggacc ctgtgacgaa 120  
 c 121

<210> 6  
 <211> 57  
 <212> DNA  
 <213> Herpes simplex virus

<400> 6  
 ataagctgca ttgcgaacca ctagtgcgcg tttttcgtgt gcacgcgta tcacggc 57

<210> 7  
 <211> 48  
 <212> DNA  
 <213> Hepatitis B virus

<400> 7  
 ctttgtacta ggaggctgta ggcataaatt ggtctgttca ccagcacc

48

<210> 8  
 <211> 533  
 <212> DNA  
 <213> Hepatitis B virus

<400> 8  
 taacaaaaca aaaagatggg gttattccct aaacttcatg ggttacgtaa ttggaagttg 60  
 ggggacattg ccacaagatc atattgtaca aaagatcaaa cactgtttta gaaaacttcc 120  
 tgtaaacagg cctattgatt ggaaagtatg tcaaaggatt gtgggtcttt tgggctttgc 180  
 tgctccattt acacaatgtg gatatcctgc cttaatgcct ttgtatgcat gtatacaagc 240  
 taaacaggct ttcactttct cgccaactta caaggccttt ctaagtaaac agtacatgaa 300  
 cctttacccc gttgctcggc aacggcctgg tctgtgccaa gtgtttgctg acgcaacccc 360  
 cactggctgg ggcttggcca taggccatca gcgcatgcgt ggaacctttg tggctcctct 420  
 gccgatccat actgcggaac tcctagccgc ttgttttgct cgcagccggt ctggagcaaa 480  
 gtcacatagga actgacaatt ctgtcgtcct ctgcgcgaaa tatacatcgt ttc 533

<210> 9  
 <211> 158  
 <212> DNA  
 <213> Simian cytomegalovirus

<400> 9  
 gtcagacaga cagacagtta tatgggctgg tcctataac tctgccattg taaccccata 60  
 tagccagaca gttagcattg catctattga tgatgtacta atgtattgta accccccta 120  
 tgccattgtc taactgtact aatgtatgat attatacc 158

<210> 10  
 <211> 131  
 <212> DNA  
 <213> Oryctolagus cuniculus

<400> 10  
 gatctttttc cctctgccaa aaattatggg gacatcatga agccccttga gcatctgact 60  
 tctggctaatt aaaggaaatt tattttcatt gcaatagtgt gttggaattt tttgtgtctc 120  
 tcactcgga g 131

<210> 11  
 <211> 204  
 <212> DNA  
 <213> Simian cytomegalovirus

<400> 11  
 atatatactc tatgttatac tctatgatat acaatatata ctcatgaaca ctatgtactt 60  
 ggtgtatgac tcattattgt ctgggacttg gttgggactt gggttggttg gaagaatgtt 120  
 gtgcctgtac ttgtgctgtg ctgtggatct caataaatgt gactatgttc aaaacactaa 180  
 gtgcccccg gtcttcttta acta 204

<210> 12  
 <211> 163  
 <212> DNA  
 <213> Herpes simplex virus 2

<400> 12  
 gaagacgagc tctaagggag gggaggggag ctgggcttgt gtataaataa aaagacaccg 60  
 atgttcaaaa atacacatga cttctggtat tggttttgcct tgggttttat ttggggggggg 120  
 gggggcggtgt gactagaaaa acaaatgcag acatgtgcta acg 163

<210> 13  
 <211> 191  
 <212> DNA  
 <213> Human papillomavirus type 16

<400> 13  
 aattgttaca tataattggt gtataccata acttactatt ttttcttttt tattttcata 60  
 tataattttt ttttttggtt gtttggttgt tttttaataa actgttatta cttacaatg 120  
 cgacacaaac gttctgcaaa acgcacaaaa cgtgcatcgg ctaccaact ttataaaaca 180  
 tgcaaacagg c 191

<210> 14  
 <211> 3759  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 pJV expression vector

<220>  
 <221> Intron  
 <222> (1725)..(1857)  
 <223> Rat Ins IntA

<220>  
 <221> misc\_feature  
 <222> (1)..(44)  
 <223> Tn903, pUC4K Remnants

<220>  
 <221> misc\_feature  
 <222> (861)..(896)  
 <223> Tn903, pUC4K Remnants

<220>  
 <221> misc\_feature  
 <222> (897)..(902)  
 <223> pUC19 MCS

<220>  
 <221> polyA\_signal  
 <222> (2556)..(2686)  
 <223> rGLOB pA

<220>  
 <221> polyA\_site  
 <222> (2647)..(2647)  
 <223> PolyA\_Site\_1

<220>  
 <221> promoter  
 <222> (903)..(1587)  
 <223> CMV Pro

<220>  
 <221> 3'UTR  
 <222> (2012)..(2544)  
 <223> HBVenh

<220>  
 <221> 5'UTR  
 <222> (1864)..(1984)  
 <223> 5'-UTR of HBV pre-S2

<220>  
 <221> misc\_feature  
 <222> (1719)..(1724)  
 <223> Bam/Bgl fusion

<220>  
 <221> misc\_feature  
 <222> (1985)..(1987)  
 <223> ATG-Nhe

<220>  
 <221> misc\_feature  
 <222> (1988)..(2011)  
 <223> CDS insertion site

<220>  
 <221> misc\_feature  
 <222> (2545)..(2555)  
 <223> unknown

<220>  
 <221> exon  
 <222> (1588)..(1718)  
 <223> CMV Exon 1/2

<220>  
 <221> misc\_feature  
 <222> (2693)..(3759)  
 <223> pUC19

<220>  
 <221> misc\_feature  
 <222> (45)..(860)  
 <223> KanR (Tn903) complement

<400> 14  
 ggcgtaatgc tctgccagtg ttacaaccaa ttaaccaatt ctgattagaa aaactcatcg

agcatcaaat	gaaactgcaa	tttattcata	tcaggattat	caataccata	tttttgaaaa	120
agccgtttct	gtaatgaagg	agaaaactca	ccgaggcagt	tccataggat	ggcaagatcc	180
tggtatcggg	ctgcgattcc	gactcgteca	acatcaatac	aacctattaa	tttcccctcg	240
tcaaaaataa	ggttatcaag	tgagaaatca	ccatgagtga	cgactgaatc	cggtgagaat	300
ggcaaaagct	tatgcatttc	tttccagact	tgttcaacag	gccagccatt	acgctcgtca	360
tcaaaatcac	tgcgcatcaac	caaaccgtta	ttcattcgtg	attgcgctcg	agcgagacga	420
aatacgcgat	cgctgttaaa	aggacaatta	caaacaggaa	togaatgcaa	ccggcgagg	480
aacactgcc	gcgcatcaac	aatatatttc	cctgaatcag	gatattcttc	taatacctgg	540
aatgctgttt	ttccggggat	cgcagtgggtg	agtaaccatg	catcatcagg	agtacggata	600
aatcaattga	tgggtcggaag	aggcataaat	tccgtcagcc	agtttagtct	gaccatctca	660
tctgtaacat	cattggcaac	gctacccttg	ccatgtttca	gaaacaactc	tggcgcatcg	720
ggcttcccat	acaatcgata	gattgtcgca	cctgattgcc	cgacattatc	gcgagcccat	780
ttatacccat	ataaatcagc	atccatgttg	gaatttaatc	gcggcctcga	gcaagacgtt	840
tcccgttgaa	tatggctcat	aacacccctt	gtattactgt	ttatgtaagc	agacaggtcg	900
acaatattgg	ctattggcca	ttgcatacgt	tgtatctata	tcataatatg	tacatttata	960
ttggctcatg	tccaatatga	ccgccatggt	gacattgatt	attgactagt	tattaatagt	1020
aatcaattac	ggggtcatta	gttcatagcc	catatatgga	gttcgcggtt	acataactta	1080
cggtaaatgg	ccgcctggc	tgaccgccc	acgacccccg	cccattgacg	tcaataatga	1140
cgtatgttcc	catagtaacg	ccaataggga	ctttccattg	acgtcaatgg	gtggagtatt	1200
tacggtaaac	tgcccacttg	gcagtacatc	aagtgtatca	tatgccaagt	ccgcccccta	1260
ttgacgtcaa	tgacggtaaa	tggcccgcct	ggcattatgc	ccagtacatg	accttacggg	1320
actttcctac	ttggcagtag	atctacgtat	tagtcatcgc	tattaccatg	gtgatgcggt	1380
tttggcagta	caccaatggg	cgtggatagc	ggtttgactc	acggggattt	ccaagtctcc	1440
accccatgga	cgtcaatggg	agtttgtttt	ggcaccaaaa	tcaacgggac	tttccaaaat	1500
gtcgtataaa	ccccgccccg	ttgacgcaaa	tgggcggtag	gcgtgtacgg	tgggaggtct	1560
atataagcag	agctcgttta	gtgaacc gtc	aga tgc cct	gga gac gcc	atc cac	1614

Val Arg Ser Pro Gly Asp Ala Ile His

1

5

gct gtt ttg acc tcc ata gaa gac acc ggg acc gat cca gcc tcc gcg	1662
Ala Val Leu Thr Ser Ile Glu Asp Thr Gly Thr Asp Pro Ala Ser Ala	
10 15 20 25	

gcc ggg aac ggt gca ttg gaa cgc gga ttc ccc gtg cca aga gtg act	1710
Ala Gly Asn Gly Ala Leu Glu Arg Gly Phe Pro Val Pro Arg Val Thr	
30 35 40	

cac cgt cc ggatctcagc aagcaggtat gtactctcca ggggtgggcct ggcttcccca	1768
His Arg	

gtcaagactc	cagggatttg	agggacgctg	tgggctcttc	tcttacatgt	accttttgct	1828
tgctcaacc	ctgactatct	tccaggtcag	gatcccagag	tcaggggtct	gtattttcct	1888
gctgggtggc	ccagttcagg	aacagtaaac	cctgctccga	atattgcctc	tcacatctcg	1948
tcaatctccg	cgaggactgg	ggaccctgtg	acgaacatgg	ctagcgggccc	cagatctggg	2008
ccctaacaaa	acaaaaagat	ggggttattc	cctaaacttc	atgggttacg	taattggaag	2068
ttgggggaca	ttgccacaag	atcatattgt	acaaaagatc	aaacactggt	ttagaaaact	2128
tccgttaaac	aggcctattg	attggaaaagt	atgtcaaagg	attgtgggtc	ttttgggctt	2188
tgctgtccca	tttacacaat	gtggatatcc	tgcttaaatg	cctttgtatg	catgtataca	2248
agctaaacag	gctttcactt	tctcgccaac	ttacaaggcc	tttctaagta	aacagtacat	2308
gaacctttac	cccgttgctc	ggcaacggcc	tggctgtgtc	caagtgtttg	ctgacgcaac	2368
ccccactggc	tggggcttgg	ccataggcca	tcagcgcgatg	cgtggaacct	ttgtggctcc	2428
tctgccgatc	catactgcgg	aactcctagc	cgcttgtttt	gctcgcagcc	ggctctggagc	2488
aaagctcata	ggaactgaca	attctgtcgt	cctctgcggy	aaatatacat	cgtttgcgatc	2548
tacgtatgat	ctttttccct	ctgccaaaaa	ttatggggac	atcatgaagc	cccttgagca	2608
tctgacttct	ggctaataaa	ggaaatttat	tttcattgca	atagtgtgtt	ggaatttttt	2668
gtgtctctca	ctcggaagga	attctgcatt	aatgaatcgg	ccaacgcgcy	gggagaggcg	2728
gtttgcgtat	tgggcgctct	tccgcttcct	cgctcaactga	ctcgcgtgcgc	tcggctcgttc	2788

```

ggctgcgggcg agcgggtatca gctcactcaa aggcggtaat acggttatcc acagaatcag 2848
gggataacgc aggaaagaac atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa 2908
aggccgcggtt gctggcggttt ttccataggc tccgcccccc tgacgagcat cacaaaaatc 2968
gacgctcaag tcagaggtgg cgaaaccgca caggactata aagataccag gcgtttcccc 3028
ctggaagctc cctcgtgcmc tctcctgttc cgaccctgcc gcttaccgga tacctgtccg 3088
cctttctccc ttcggaagc gtggcgcttt ctcatagctc acgctgtagg tatctcagtt 3148
cggtgtaggt cgttcgctcc aagctgggct gtgtgcacga acccccgtt cagcccagacc 3208
gctgcmcctt atccggtaac tatcgtcttg agtccaaccc ggtaagacac gacttatcgc 3268
cactggcagc agccactggt aacaggatta gcagagcgag gtatgtaggc ggtgctacag 3328
agttcttgaa gtggtggcct aactacggct acactagaag aacagtattt ggtatctgcg 3388
ctctgctgaa gccagttacc ttcggaaaaa gagtggtag ctcttgatcc ggcaaacaaa 3448
ccaccgctgg tagcgggtgt ttttttgttt gcaagcagca gattacgcgc agaaaaaag 3508
gatctcaaga agatcctttg atcttttcta cggggtctga cgctcagtgg aacgaaaact 3568
cacgttaagg gatttttggtc atgagattat caaaaaggat cttcacctag atccttttaa 3628
attaaaaatg aagtttttaa tcaatctaaa gtatatatga gtaaacttgg tctgacagtt 3688
accaatgctt aatcagtgag gcacctatct cagcgatctg tctatttcgt tcatccatag 3748
ttgcctgact c 3759

```

<210> 15

<211> 42

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 15

ggaggatccg gacggtgagt cactcttggc acggggaatc cg 42

<210> 16

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 16

ggtgaatatg gctcataaca c 21

<210> 17

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 17

ccgccgaaca tggagaacat cgc 23

<210> 18  
 <211> 33  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 18  
 cacagatctt ttgttagggt ttaaattgtat acc

33

<210> 19  
 <211> 29  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 19  
 ggaggatcct gacctggaag atagtcacc

29

<210> 20  
 <211> 26  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 20  
 ggaggatcca tcagcaagca ggtatg

26

<210> 21  
 <211> 33  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 21  
 ggagctagcg ggcgtttgac ctccggcgtc ggg

33

<210> 22  
 <211> 37  
 <212> DNA  
 <213> Artificial sequence



<220>  
 <223> Description of Artificial Sequence: Synthetic  
       primer  
  
 <400> 22  
 ggagaattca gatctcctct agtaaaacaa tggctgg 37  
  
 <210> 23  
 <211> 25  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
       primer  
  
 <400> 23  
 ggagctagcc ttctaaccga ggtcg 25  
  
 <210> 24  
 <211> 30  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
       primer  
  
 <400> 24  
 ggaagatctc cttactccag ctctatgctg 30  
  
 <210> 25  
 <211> 27  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
       primer  
  
 <400> 25  
 ggccaattcc ttccgagtga gagacac 27  
  
 <210> 26  
 <211> 43  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
       primer  
  
 <400> 26  
 ggagtataca tttaaagggc cctaacaaaa caaaaagatg ggg 43

<210> 27  
 <211> 31  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 27  
 ggagctagct cgtttacttt gaccaagaac g

31

<210> 28  
 <211> 36  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 28  
 ggaagatctc cttatttttg acaccagacc aactgg

36

<210> 29  
 <211> 29  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 29  
 ggagtcgacc tgtctgctta cataaacag

29

<210> 30  
 <211> 26  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 30  
 cgtaatgctc tgccagtgtt acaacc

26

<210> 31  
 <211> 20  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic primer  
  
 <400> 31  
 gaaagatctc agcaagcagg 20  
  
 <210> 32  
 <211> 47  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic primer  
  
 <400> 32  
 ggaggatcct gacctggaag atagtcaggg ttgaggcaag caaaagg 47  
  
 <210> 33  
 <211> 12  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic primer  
  
 <400> 33  
 ctagcggggcc ca 12  
  
 <210> 34  
 <211> 12  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic primer  
  
 <400> 34  
 gatctggggcc cg 12  
  
 <210> 35  
 <211> 28  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic primer

<400> 35  
 ggagctagca tcatcccagt tgaggagg 28

<210> 36  
 <211> 28  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic primer

<400> 36  
 ggtagatctc ctcatgtctg ctcgaagc 28

<210> 37  
 <211> 29  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic primer

<400> 37  
 ccaagctagc gacaaaactc acacatgcc 29

<210> 38  
 <211> 45  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic primer

<400> 38  
 ggaagatctc gtttaccctt gtcatttacc cggagacagg gagag 45

<210> 39  
 <211> 57  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 39  
 aagatgtcca gactctgtct ctccgtggcc ctctcgtgc tctcgggac actcgcc 57

<210> 40  
 <211> 24  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 40  
 ggaactagta agatgtccag actc

24

<210> 41  
 <211> 25  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 41  
 ggaagctagc ggcgagtgtc ccgag

25

<210> 42  
 <211> 75  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 42  
 ggaaagatgg ccagcctctt tgccacattt ctctgtgtgc tcgtgagcct cagcctcgcc  
 agcgaaagca gcgcc

60

75

<210> 43  
 <211> 24  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 43  
 ggaactagtg gaaagatggc cagc

24

<210> 44  
 <211> 26  
 <212> DNA  
 <213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 44

ggaagctagc ggcgctgctt tcgctg

26

<210> 45

<211> 51

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 45

aggtctttgc taatcttggt gctttgcttc ctgcccctgg ctgctctggg g

51

<210> 46

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 46

ggaactagta ggtctttgct aatc

24

<210> 47

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 47

ggaagctagc cccagagca gccag

25

<210> 48

<211> 31

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 48

ggagctagct cgtttacttt gaccaagaac g

31

<210> 49  
 <211> 25  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 49  
 ggaagatctc cggtgagtgg tgctg

25

<210> 50  
 <211> 32  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 50  
 gcaggatcca gtagacctgg agagaggaca ag

32

<210> 51  
 <211> 29  
 <212> DNA  
 <213> Artificial sequence

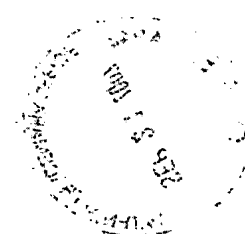
<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 51  
 ggaagatcta caaggtgagc tgctgtggc

29

<210> 52  
 <211> 490  
 <212> DNA  
 <213> Pseudo rabies virus

<400> 52  
 tggccgcaga gcgggcccgg catgcaaadc agaggcgcgc gggagacgcc tccgcgcgcc 60  
 cattggcccc ggcgagccga gatggccgcc gcgggggccc gacatgcaaa gtagacgcga 120  
 gaggaagtag ggagagaaat ccattggcc gtcgaggggc caagatggcg ccctcggggc 180  
 cggacatgca aagtagacgc gagaggaagt gggcgagaga aatccattg gccgtcgatg 240  
 gggcaagatg gccgcgcgcg gggccgggca tgcaaatggt cctcgcgagg aagttcctcg 300  
 cgaaatccca ttggccggcg gccgccatct tgggcccggc atgcaaagca gacggcagag 360  
 gaagcggggc agaaaaatcc cattggcccg ccgtcgggga agtccgcggc gaaaatcggc 420  
 cattggtccg cttacctggg ggcgggctct cctcggggcg cttataagcg cggtctccat 480  
 cgtagcactt 490



<210> 53  
 <211> 495  
 <212> DNA  
 <213> Rous sarcoma virus

<400> 53  
 ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg cgagcaaaat ttaagctaca 60  
 acaaggcaag gcttgaccga caattgcatg aagaatctgc ttagggtag gcgttttgcg 120  
 ctgcttcgcg atgtacgggc cagatatacg cgtatctgag gggactaggg tgtgtttagg 180  
 cgaaaagcgg ggcttcgggt gtacgcggtt aggagttccc tcaggatata gtagtttcgc 240  
 ttttgcatag ggagggggaa atgtagtctt atgcaataca cttgtagtct tgcaacatgg 300  
 taacgatgag ttagcaacat gccttacaag gagagaaaaa gcaccgtgca tgccgattgg 360  
 tggaagtaag gtggtacgat cgtgccttat taggaaggca acagacaggt ctgacatgga 420  
 ttggacgaac cactgaattc cgcattgcag agataattgt atttaagtgc ctagctcgat 480  
 acaataaacg ccatt 495

<210> 54  
 <211> 43  
 <212> PRT  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 pJV peptide

<400> 54  
 Val Arg Ser Pro Gly Asp Ala Ile His Ala Val Leu Thr Ser Ile Glu  
 1 5 10 15  
 Asp Thr Gly Thr Asp Pro Ala Ser Ala Ala Gly Asn Gly Ala Leu Glu  
 20 25 30  
 Arg Gly Phe Pro Val Pro Arg Val Thr His Arg  
 35 40